

JUN 24 2008

MUR-045-USA-PCT

REMARKS

Appreciation is hereby expressed to the Examiner for the very thorough and professional Office Action. Pursuant to that Office Action, Claim 1 has been amended to more definitely set forth the invention and obviate the rejection. Support for the amendment of Claim 1 can be found in the previous version of Claim 1, and is also disclosed in the Specification on page 9, lines 2 and 3 and is further described in the Specification on page 10, lines 17-22. The present amendment is deemed not to introduce new matter. Claims 1-6 remain in the application.

Reconsideration is respectfully requested of the rejection of Claims 1-6 under 35 U.S.C. 103(a) as being unpatentable over Jain, et al. in view of Jacobsen, et al.

In amended Claim 1, paragraph (c) has been deleted and inserted again as paragraph (iii). This revision was made because the deformed portion is one element of the substrate film as described in the Specification on page 9, lines 2 and 3, which provides that "The protrusion (deformed portion) 70 is molded together with the recess 60", for example.

Further, the expression "printed on the substrate film" has been added after "an electrode layer" in paragraph (b) in order to show the electrode layer is easy to crack by warp of the substrate film because of the printing thereon, relating to the following advantages.

One of the advantages of the present invention is described on page 10, lines 17-22, which provide that:

"On the other hand, it was found that, in the flange section provided with the protrusion 70, warp was not caused in the outward flange section 110f, the insulating layer and the electrode layer in the step portion were stable, and the likelihood of crack and disconnection was reduced."

MUR-045-USA-PCT

In the rejection, the Examiner equates the barrier seal 32 of Jacobsen, et al. to the protrusion 70 of the present invention. It is respectfully urged that it is unwarranted to equate the raised central section 32 of Jacobsen, et al. with the protrusion 70 of the present invention for several reasons. First, these elements are structurally different and, second, these elements function in different ways from one another.

For example, the raised barrier for ridge 32 formed on and attached to the bottom surface of the outer section 12 of the upper sheet material 2 in Jacobsen, et al. is formed of a compliant, resilient, hydrophobic and tacky or sticky material (column 3, lines 15-20). Also, the composition of the barrier 32 advantageously includes a silicon gel and silicon adhesive (column 3, lines 21-23).

In Jacobsen, et al., a cover 36 is placed on a bottom surface of the iontophoretic bioelectrode 2 to protect the parts thereof and especially the barrier 32 from damage or contamination. The cover 36 is simple plastic, coated with a release agent to allow easy removal from the barrier 32 prior to application of the bioelectrode to a person's skin. The stickiness of the barrier 32 (and also that of the outer section 12) is sufficient to hold the protective cover in place until time of use (column 3, lines 49-57).

After removal of the protective cover 36, the bioelectrode is placed on the skin of a person and the resultant barrier 32 is compliant, resilient and sticky to allow adherence to the skin of a person. Because it is compliant, the barrier conforms to the skin surface shape to form the desired seal (column 3, lines 32-37).

It is therefore clear that the bioelectrode of Jacobsen, et al. does not contain a microporous membrane, and instead, when an ion-containing solution is introduced into the bioelectrode of Jacobsen, et al. through the structure 28, the ion-containing solution comes directly in contact with the skin surface and is sealed against leakage by means of the barrier 32 which adheres to the skin.

MUR-045-USA-PCT

In this connection, Jacobsen, et al. indicates that:

“Provision of the compliant, resilient and sticky barrier 32 eliminates the need for a microporous membrane or other solution retaining structure being built into the electrode. The electrode may be put in place on a person's skin, the desired solution introduced into the electrode, and then the solution administered by iontophoresis into the person's skin in a simple and efficient fashion”. (Jacobsen, et al., column 3, lines 58-68)

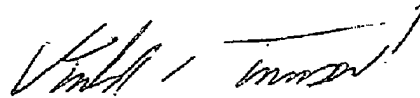
In contrast, in the present invention, a cap 90 covers the recess 60 which is filled with the gel 80 (Fig. 4 and Specification, page 9, lines 13-17). Moreover, there is no disclosure in the present application that the deformed portion is formed of a silicon gel and a silicon adhesive. It is therefore clear that the deformed portion of the present invention functions entirely different from the barrier 32 of Jacobsen, et al. For these reasons, it is respectfully urged that one of ordinary skill in the art would not consider these structures to be equivalent because the structures themselves are different and they function in different ways. Consequently, the Examiner would be justified in no longer maintaining the rejection. Withdrawal of the rejection is accordingly respectfully requested.

In view of the foregoing, it is respectfully submitted that the application is now in condition for allowance, and early action and allowance thereof is accordingly respectfully requested. In the event there is any reason why the application cannot be allowed at the present time, it is respectfully requested that the Examiner contact the undersigned at the number listed below to resolve any problems.

MUR-045-USA-PCT

Respectfully submitted,

TOWNSEND & BANTA



Donald E. Townsend
Reg. No. 22,069

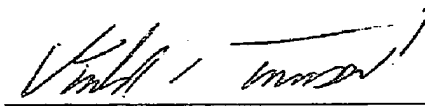
Date: June 24, 2008

Customer No. 27955

TOWNSEND & BANTA
c/o FoundationIP
P.O. Box 52050
Minneapolis, MN 55402
(202) 220-3124

CERTIFICATE OF TRANSMISSION

I hereby certify that this facsimile transmission, consisting of a 7-page Amendment After Final and 1-page Transmittal, in U.S. patent application serial No. 10/517,535, filed on September 12, 2005, is being facsimile transmitted to the U.S. Patent and Trademark Office (Fax no. 571-273-8300) on June 24, 2008.



Donald E. Townsend